

# FMA-100 Configuration for FTG Operation

**Entertainment-Lodging Industry Applications** 

# Installation & Configuration Guide

For Customer Support/Service, please call:

1-888-865-3026

www.lgcommercial.com • www.zenith.com

#### RECORD Model and SERIAL NUMBER

The model and serial number of this appliance is located on the back of the cabinet. For future reference, we suggest that you record those numbers here:

Model No. Serial No.
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**WARNING:** TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

#### WARNING:

TO PREVENT FIRE OR SHOCK HAZARDS, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

## POWER CORD POLARIZATION:

This product is equipped with a 3-wire grounding-type alternating current line plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the three-wire ground type plug.

#### NOTE TO CABLE/TV INSTALLER:

This reminder is provided to call the cable TV system installer's attention to Article 820-40 of the National Electric Code (U.S.A.). The code provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of the cable entry as practical.

## **REGULATORY INFORMATION:**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### CAUTION:

Do not attempt to modify this product in any way without written authorization from LG Electronics U.S.A., Inc. Unauthorized modification could void the user's authority to operate this product.

## **COMPLIANCE:**

The responsible party for this product's compliance is: LG Electronics U.S.A., Inc. 1000 Sylvan Avenue, Englewood Cliffs, NJ 07632, USA • Phone: 1-201-816-2000.

Marketed and Distributed in the United States by LG Electronics U.S.A., Inc. 2000 Millbrook Drive, Lincolnshire, IL 60069

## IMPORTANT SAFETY INSTRUCTIONS

## SAFFTY INSTRUCTIONS

## Important safeguards for you and your new product

This product has been manufactured and tested with safety in mind. However, improper use can result in potential electrical shock or fire hazards. To avoid defeating the safeguards that have been built into the new product, please read and observe the following safety points when installing and using the new product, and save them for future reference.

Observing the simple precautions discussed in this installation and operating guide can help get many years of enjoyment and safe operation that are built into the new product.

This product complies with all applicable U.S. Federal safety requirements.

## 1. Read Instructions

All the safety and operating instructions should be read before the product is operated.

## 2. Follow Instructions

All operating and use instructions should be followed.

#### 3. Retain Instructions

The safety and operating instructions should be retained for future reference.

## 4. Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

## 5. Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

#### 6. Water and Moisture

Do not use this product near water for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.

## 7. Accessories, Carts, and Stands

Do not place this product on a slippery or tilted surface, or on an unstable cart, stand, tripod, bracket, or table. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.



## 8. Transporting Product

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

## 9. Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

## 10. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

## 11. Power Sources

This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.

## 12. Power Cord Polarization (Some models)

This product is equipped with a three-wire grounding type alternating-current power plug. This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the three-wire ground-type plug.

## 13. Power Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

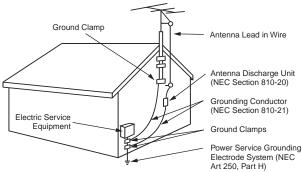
# IMPORTANT SAFETY INSTRUCTIONS

(Continued from previous page)

## 14. Outdoor Antenna Grounding

If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (U.S.A.), ANSI/ NFPA 70 provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

# Example of Grounding According to National Electrical Code Instructions



NEC - National Electrical Code

## 15. Lightning

For added protection for this product (receiver) during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

## 16. Power Lines

An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

## 17. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

## 18. Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

## 19. Servicing

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

## 20. Damage Requiring Service

Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- a. If the power-supply cord or plug is damaged.
- b. If liquid has been spilled, or objects have fallen into the product.
- c. If the product has been exposed to rain or water.
- d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
- e. If the product has been dropped or the cabinet has been damaged.
- f. If the product exhibits a distinct change in performance.

## 21. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.

## 22. Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

## 23. Wall or Ceiling Mounting

The product should be mounted to a wall or ceiling only as recommended by the manufacturer. The product may slide or fall, causing serious injury to a child or adult, and serious damage to the product.

## 24. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

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FMA-100 Installation Procedures	Warranty

## **Setup Checklist**

Installation and configuration of the FMA-100 requires the following hardware, tools and software.

- FMA-100
- Manual
- · Warranty sheet
- 75-ohm coaxial terminator (for the FMA-100 RF In port)
- 7 foot Ethernet crossover cable (for laptop or tablet access)
- Low pass filter (6MLP-50)
- Laptop or tablet with Ethernet port\*
- Ethernet straight-through cable (for hotel network access)\*
- Coaxial cable barrel adapter\*
- Coaxial jumper cables\* (Use jumper cable(s) to protect filter from damage)
- RF coaxial cable barrel\*
- Termcode\*\*
  - Version 2.58 or higher for HC11 terminals
  - Version 6.0 or higher for HC12 terminals
- \* These items are not included in the FMA-100 shipping container but are necessary to configure and install the FMA-100.
- \*\* Terminals installed at sites using the FMA-100 must have the appropriate version of termcode loaded depending on the terminal type.

## **FTG Management Appliance Overview**

## **Purpose and Definition**

The FTG Management Appliance (FMA-100) is used to configure and deliver the channel lineup to the guest room terminals via the hotel's coaxial distribution. Channel lineup changes are completed without requiring room visits.

This manual provides the steps to install, configure and troubleshoot the FMA-100.

## **Tips and Warnings**

FMA-100 Configuration

- The FMA-100 configuration can only be performed on site.
   Remote connectivity for configuration or troubleshooting is not available.
- For ease of configuration, the FMA-100 should be installed in the FTG rack prior to configuration.
- If the configuring laptop is running Windows Vista, resetting
  the power on the FMA-100 while the laptop is connected may
  cause a network conflict issue. To correct a network conflict,
  disable and then enable the network interface on the laptop
  and refresh the browser page.
- The FMA-100 default IP address is 10.20.1.128. To configure the FMA-100, the configuring laptop or tablet must be on the same subnet (255.255.248.0) as the FMA-100.
- Up to 100 channels can be configured with the FMA-100, but only 20 channels can be viewed or configured at a time.
- After configuring a page or range of channels, the configuration must be saved before proceeding to the next page or range of channels. If the configuration is not saved, the channel configurations for that page will be lost.

## FMA-100 Output

- The FMA-100 outputs a 42dB signal at a frequency of 50.5 MHz.
- The FMA-100 output should have a low pass filter (6MLP-50) installed to protect channels 2 and 3 from any potential RF interference produced by the FMA-100.
- The FMA-100 output should be padded as necessary to meet the 3-10 dB signal level in the guest room.

## FMA-100 Automatic Updates

- Upon power-up, the FMA-100 will search for a DHCP server to obtain an IP address and receive automatic date/time updates. If a DHCP server is not found within 60 seconds, the FMA-100 will revert to the default IP address (10.20.1.128).
- The date and time will require reconfiguration each time power is lost on the FMA-100 unless it is connected to a hotel network with a DHCP server and Internet access.

## FMA-100 Channel Lineup

• The FMA-100 will broadcast the channel lineup and the time/date every 5 minutes. This allows a terminal to be replaced in a room without additional configuration.

## LG TVs with LG Jack Packs

 If the LG TV's Auxiliary (Aux) channel is configured as the Startup Channel in the FMA-100's channel lineup, the TV will power on to a split screen. Always configure the Startup Channel to a channel other than the Aux channel.

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## **Purpose and Definition**

Delivery of the channel lineup requires the installation and configuration of an FTG Management Appliance (FMA-100). This section contains steps to install and configure the FMA-100.

## FMA-100 Connections

Refer to the FMA-100 diagram and connectivity table for connections and port information.

## FMA-100 Connectivity

Port Name	Description
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Ethernet Connects via Ethernet (crossover) cable to the

laptop or tablet for configuration purposes. Connects via Ethernet (straight-through) cable

to the hotel's network, if available.

RF Out Connects via coaxial cable to the combiner in

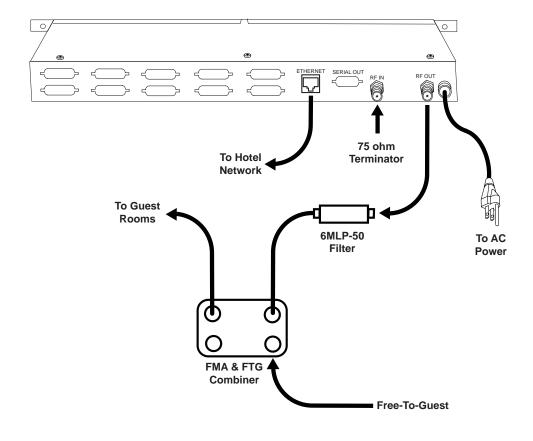
the FTG rack.

RF In Not Applicable
Serial Out Not Applicable
Kports 0-9 Not Applicable

## Install the FMA-100 in an FTG Rack

Complete the following steps to install the FMA-100 in the FTG rack.

- 1. Mount the FMA-100 in the FTG rack, if applicable.
- 2. Plug the FMA-100 into the FTG rack's power strip, if applicable.



## Configure the Laptop / Tablet

## Configure the Laptop/Tablet

Complete the following steps to configure the laptop or tablet that will be used to configure the FMA-100.

## Windows XP

- 1. Right-click on My Network Places on the desktop.
- 2. Select Properties.
- 3. Right-click on the Local Area Connection icon.
- 4. Select Properties.
- 5. Select Internet Protocol (TCP/IP).
- 6. Select the Use the following IP address radio button.
- 7. Type an IP address from the following range: 10.20.1.81 10.20.1.92
- 8. Type 255.255.248.0 in the Subnet mask field.
- 9. Select OK twice.

## Windows Vista

- 1. Select the Start button on the desktop.
- 2. Right-click on Network.
- 3. Select Properties.
- 4. Select Manage Network Connections.
- 5. Right-click on Local Area Connection.
- 6. Select Properties.
- 7. Select the Use the following IP address radio button.
- 8. Type an IP address from the following range: 10.20.1.81 10.20.1.92
- 9. Type 255.255.248.0 in the Subnet mask field.
- 10. Select OK twice.

## Connect to the FMA-100

Complete the following steps to access the FMA-100 software.

1. Connect an Ethernet (crossover) cable between the Ethernet port on the laptop/tablet and the FMA-100's Ethernet port.

- 2. Launch a web browser.
- 3. Type http://10.20.1.128 in the browser's address bar and press <Enter>. The Current Channel Lineup screen will display.

## Configure the Date and Time

Set Date and Time on the FMA-100

- 1. Select the Configure Date/Time link at the bottom of the Current Channel Lineup screen to display the System Date/Time Configuration screen.
- 2. Modify the following System Date/Time Configuration fields.
  - Month
  - Day of Month (1-31)
  - Year (2008-2047)
  - Day of Week
  - Hour (0-23)
  - Minutes (0-59)
  - Seconds (0-59)
- 3. If the FMA-100 will be connected to the hotel's network, configure the following fields under \*Internet Time Server Settings.

Note: The hotel's network must have a DHCP server and Internet access for the FMA-100 to receive automatic time/date updates.

- Time Zone
- Observe DST (Daylight Savings Time)
- 4. Select the Save Time/Date button.

Note: After selecting the Save Time/Date button, the screen will begin to refresh/reload. Wait for the screen to completely reload before proceeding to the next step.

5. Select the View Channel Lineup link to return to the Current Channel Lineup screen.

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## Configure the Channel Lineup

- 1. Select the Configure Channel Lineup link. A login screen will appear.
- 2. Type Inet in the User name field.
- 3. Type the appropriate password in the Password field.
- 4. Select the OK button.
- 5. Use the Channel Select drop-down list to select the channel range to configure.
  - Note: Up to 100 channels can be configured in the FMA-100, but only 20 channels can be viewed or configured at a time.
- 6. Select the Go button to display the selected channel range.
- 7. Add the FTG channels to the lineup.
  - Select the appropriate tuning type from the Tuning Type drop-down list.
  - Type the analog modulator in the Analog Mod field, if applicable.
  - Type the digital modulator in the Digital Mod field, if applicable.
  - Type the digital stream in the Digital Stream field, if applicable.
  - Type the FTG channel's OSD (On Screen Display) in the OSD field.
    - The OSD and Call Letters fields (combined) can have a max of 17 characters including spaces.
    - If a channel has both OSD and Call Letters they will be separated by a dash (-) on the TV's OSD. Note: The dash will count as one of the 17 characters that can be used.

- Type the station's call letters in the Call Letters field.
- Select Enabled from the State drop-down box.
- Repeat these steps for each additional FTG channel listed on the page.
- 8. Select the Save Configuration button after all the FTG channels on the page have been configured.

Warning: The Save Configuration button must be selected before configuring or editing the channel lineup for a different channel range! If the Save Configuration button is not selected before configuring a different page of chan-

nels, the channel configurations for that page will be lost!

- 9. Repeat the channel configuration steps for another channel range until all FTG channels are configured.
- 10. Type the first channel the TV should access when it is powered on in the Startup Channel field.

#### Notes:

- If the Startup Channel is disabled, the lowest enabled channel will default as the new Startup Channel.
- Auxiliary sources should not be configured as the Startup Channel.
- 11. Select the Save Configuration button.
- 12. Wait for the page to refresh/reload.
- 13. Select the View Channel Lineup link to return to the Current Channel Lineup screen.

## Connect the FMA-100 to the Hotel's Distribution Resources/Troubleshooting

Complete the following steps to connect the FMA-100 to the hotel's coaxial distribution and Internet connection.

- 1. Connect the FMA-100 to the hotel's coaxial distribution and Internet connection.
- 2. Verify the forward signal (50.5 MHz) is between 3 dB and 10 dB in the guest rooms.

Note: If the signal level is not between 3 and 10 dB, communications will be negatively affected, resulting in a partial or missing channel lineup.

3. Verify that all viewable channels have a signal level between 3 dB and 10 dB in the guest rooms.

## FMA-100 Troubleshooting

The following contains general issues and solutions related to the FMA-100.

The OSD/Call letters do not display in the guest room(s).

- If the issue affects all rooms:
  - Verify the FMA-100 is properly configured.
  - Verify the FMA-100 is balanced flat.
- If the issue is restricted to a single room:
  - Wait five minutes for the FMA-100 to re-broadcast the channel lineup and re-test.
- Check the coaxial connections and signal levels in the room.
- Replace the terminal.

The date/time is incorrect.

- If the FMA-100 is using the hotel's network for the time updates, verify the hotel's network is operational.
- Reconfigure the Time Server in the FMA-100 software interface.
- If the FMA-100 is not connected to the hotel's network or does not use the hotel's interface to receive time updates, reconfigure the FMA-100's date and time.

The laptop/tablet cannot access the FMA-100 interface.

- Verify the laptop/tablet settings are properly configured.
- Verify the Ethernet crossover cable is in good condition and connected properly.
- Ping the FMA-100 IP address (10.20.1.128). If the FMA-100 does not respond, the FMA-100 will need to be replaced.

## Reset The Channel Lineup

The reset channel lineup function enables technicians to reset or clear all configured channels from the FMA-100 channel lineup. This function may be used - but is not required - when a significant number of channels require reconfiguration.

Complete the following steps to reset the channel lineup.

- 1. Connect an Ethernet (crossover) cable between the laptop/tablet's Ethernet port and the FMA-100's Ethernet port. Tip: The laptop/tablet's network settings must be on the same subnet as the FMA-100.
- 2. Launch the laptop/tablet web browser.
- 3. Type http://10.20.1.128 in the browser's address bar and press <Enter>. The Current Channel Lineup screen will display.
- 4. Select the Configure Channel Lineup link. A login screen will appear.
- 5. Type 'Inet' in the User name field. (LNET)
- 6. Type the 'appropriate password' in the Password field.
- 7. Select the OK button.
- 8. Select the Reset Channel Lineup link at the bottom of the screen.
- 9. Select the Reset Configuration check box.
- 10. Select the Save Configuration button.
- 11. Wait for the check mark in the Reset Configuration check box to disappear, indicating that all channels have been removed from the channel lineup.
- 12. Reconfigure the channel lineup.

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## A list of definitions for some of the words found in this guide

#### 75 OHM RF CABLE

The wire that comes from an off-air antenna or cable service provider. The end looks like a hex-shaped nut with a wire sticking through the middle. It screws onto the threaded Antenna/Cable jack on the back of the TV.

#### 300 TO 75 OHM ADAPTER

A small device that connects a two-wire 300 ohm antenna to a 75 ohm RF jack. They are usually about an inch long with two screws on one end and a round opening with a wire sticking out on the other end.

## ANALOG TELEVISION

Standard television broadcasting format in 4:3 picture aspect ratio.

#### A/V CABLES

Audio/Video cables. Three cables bunched together—right audio (red), left audio (white), and video (yellow). A/V cables are used for stereo playback of videocassettes and for higher quality picture and sound from other A/V devices.

## A/V DEVICE

Any device that produces video or sound (VCR, DVD, cable box, or television).

## **AMPLIFIER**

An electronic device that amplifies sound from a television, CD player, VCR, DVD, or other Audio/Video device.

#### **ANTENNA**

The physical receiver of television signals sent over the air. A large metal piece of equipment does not always have to be visible to be using an antenna.

## CABLE

Cable service box. Refers to the descrambler box cable subscribers use to receive cable programming signals.

#### CATV

Programming provided by a cable service.

#### **DIGITAL TELEVISION**

High-resolution, cinema-quality television signals transmitted digitally.

#### DVI

Digital Video Interface Accommodates analog and digital interfaces with a single connector.

#### COMPOSITE VIDEO

Typical video jack, uses one wire for transporting three-color video signals.

#### COMPONENT VIDEO

Uses three wires for transporting three-color video signals. The end result is usually better video quality.

#### DELETED

Lets you remove channels from the list that the end user can scroll through using CH (Channel) Up/Down.

## HDMI

High-definition multi-media interface.

#### HDTV

High-definition television. Refers to television signals that have higher resolution than ordinary analog TV signals.

## **HDSTB**

High-definition set top box. Refers to a tuner device that receives high-definition television signals which have higher resolution than ordinary analog TV signals.

#### INPUT

Refers to the input jack that receives a signal from a TV, VCR, DVD Player or other Audio/Video device.

## **JACK**

An input or output connector on the back of a TV, VCR, DVD Player or other Audio/Video device.

## MONO SOUND

Mono (monaural) sound is one channel of

sound. On more than one speaker, all the speakers play the same audio.

#### OUTPUT

Refers to the output jack that sends a signal out of a VCR, DVD, or other A/V device.

## PHYSICAL CHANNEL NUMBER

See Note 1.

## RGB (Red, Green, Blue)

Connection input or output port available for producing a video image using three separate colors: Red, Green, and Blue.

#### RS-232

Serial communication port through which the TV software is updated.

#### 2ND AUDIO PROGRAMMING/SAP

Second Audio Programming (SAP) is another, separate audio channel available with some programming. Choosing SAP often refers to listening to audio in another language, such as Spanish or French.

#### SIGNAL

Picture and sound traveling through a cable, or over the air, to the TV.

#### STEREO SOUND

Stereo (Stereophonic) sound refers to audio that's divided into right and left sides.

## TUNER

Device that picks up the broadcast signal and turns it into picture and sound.

## VIRTUAL CHANNEL NUMBER

See Note 1.

#### XDS

Extended Data Service: Additional program information included on the signal provided at the discretion of the broadcaster.

#### Note 1

Refer to www.atsc.org for further information.

# FMA-100 Warranty

Broadcast Products Welcome to the LG family! We believe that you will be pleased with your new FMA-100. Please read this warranty careful-

ly, it is a "LIMITED WARRANTY" as defined under Federal Law. This warranty gives you specific legal rights, and you may

also have other rights that vary from state-to-state within the U.S.A.

LG's RESPONSIBILITY

Warranty Term One year parts and labor from date of purchase or delivery date.

Parts New or remanufactured replacements for factory-defective parts may be used. Such replacement parts are warranted for

the remaining portion of the original warranty period.

Warranty Service Warranty service is provided at LG. Customer pays for shipping charges to LG, LG pays for return shipping charges to

return FMA-100 to customer. Call 1-888-865-3026 for further information.

Not Covered This warranty covers manufacturing defects and does not cover installation, adjustment of customer controls, installation

or repair of antenna systems, cable converters or cable company-supplied equipment; it also does not cover damage due to misuse, abuse, negligence, acts of God or other causes beyond the control of LG. Any alteration of the product after

manufacture voids this warranty in its entirety.

This warranty does not cover any missing or stolen cards.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND LG SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST REVENUES OR PROFITS IN CONNECTION WITH THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

OWNER'S RESPONSIBILITY

**Effective Warranty Date** Warranty begins on the date of delivery of the FMA-100.

For your convenience, keep the dealer's dated bill of sale or delivery ticket as evidence of the purchase date.

Installation Guide Read the Installation and Setup Guide carefully so that you will understand the operation of the FMA-100 and how to

adjust the controls.

Antenna Reception problems caused by inadequate antenna or faulty antenna connections are the owner's responsibility.

Warranty Service For warranty service information, Call 1-888-865-3026. Parts and service labor that are LG's responsibility (see above)

will be provided without charge. Other service is at the owner's expense. If you have any problem in obtaining satisfacto-

ry warranty service, call 1-888-865-3026.

You must provide the model number, serial number and date of purchase or date of original installation.

For Customer Support/Service please call:

1-888-865-3026

www.lgcommercial.com